

SPECIFICATION

ISSUED : 2005.7.15

REVISED:

SCANNING RECEIVER MODEL : AE92H (UB340A)

GENERAL

1. Band Coverage : See followings

2. Frequency Range

Conventional Mode :

Band Plan 1		14 Bands			
	[Range]		[Step]	[Mode]	
	25.0000 to 29.9950	MHz	5 kHz	FM	
	30.0000 to 79.9875	MHz	12.5 kHz	FM	
	80.0000 to 82.9900	MHz	10 kHz	FM	
	83.0000 to 87.2625	MHz	12.5 kHz	FM	
	108.0000 to 136.9875	MHz	12.5 kHz	AM	
or	108.0000 to 136.9916	MHz	8.33 kHz	AM	
	138.0000 to 157.9875	MHz	12.5 kHz	FM	
	158.0000 to 160.5900	MHz	10 kHz	FM	
	160.6000 to 162.5875	MHz	12.5 kHz	FM	
	162.6000 to 173.9900	MHz	10 kHz	FM	
	406.0000 to 439.99375	MHz	6.25 kHz	FM	
	440.0000 to 465.9950	MHz	5 kHz	FM	
	466.0000 to 469.9900	MHz	10 kHz	FM	
	470.0000 to 512.0000	MHz	6.25 kHz	FM	
	806.0000 to 960.0000	MHz	12.5 kHz	FM	

Band Plan 2 (=Default Setting)		13 Bands			
	[Range]		[Step]	[Mode]	
	25.0000 to 84.0100	MHz	5 kHz	FM	
	84.0150 to 87.2550	MHz	20 kHz	FM	
	108.0000 to 136.9875	MHz	12.5 kHz	AM	
or	108.0000 to 136.9916	MHz	8.33 kHz	AM	
	137.0000 to 143.9950	MHz	5 kHz	FM	
	144.0000 to 145.9875	MHz	12.5 kHz	FM	
	146.0000 to 155.9900	MHz	10 kHz	FM	
	156.0000 to 162.0250	MHz	12.5 kHz	FM	
	162.0300 to 173.9900	MHz	10 kHz	FM	
	406.0000 to 439.99375	MHz	6.25 kHz	FM	
	440.0000 to 449.99375	MHz	6.25 kHz	FM	
	450.0000 to 469.9900	MHz	10 kHz	FM	
	470.0000 to 512.0000	MHz	6.25 kHz	FM	
	806.0000 to 960.0000	MHz	12.5 kHz	FM	

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Band Plan 3		9 Bands			
		[Range]		[Step]	[Mode]
		25.0000 to 87.2650	MHz	5 kHz	FM
		108.0000 to 136.9875	MHz	12.5 kHz	AM
or		108.0000 to 136.9916	MHz	8.33 kHz	AM
		138.0000 to 157.9950	MHz	5 kHz	FM
		158.0000 to 173.9950	MHz	5 kHz	FM
		406.0000 to 439.99375	MHz	6.25 kHz	FM
		440.0000 to 465.99375	MHz	6.25 kHz	FM
		466.0000 to 469.99375	MHz	6.25 kHz	FM
		470.0000 to 512.0000	MHz	6.25 kHz	FM
		806.0000 to 960.0000	MHz	12.5 kHz	FM

3. Memory : Programmable Channels : 200 CH
 Channels Banks : 10 Banks
 Search Skip Memory frequencies : 50

4. Step Size : 5/ 6.25 / 8.33/ 10 / 12.5 / 20 kHz

5. Display : LCD with Back Light (Color: Amber)
 Some of these icons will not be used for this model.

BANK 1 2 3 4 5 6 7 8 9 10 
F PGM  **SRCH**  **BATT** 
P888 888.888 
SCN HOLD L/O DLY PRI ALT
WX POL FIRE AIR MRN HAM

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6.Keys (PROGRAM & OPERATION): Total 17 Keys

- [1] : Numeric "1"
Set Priority Scan Mode (Function Mode)
- [2] : Numeric "2"
Channel UP (Hold Mode)
- [3] : Numeric "3"
- [4] : Numeric "4"
- [5] : Numeric "5"
Set Delay (Function Mode)
- [6] : Numeric "6"
Set the search programming (Function Mode)
- [7] : Numeric "7"
- [8] : Numeric "8"
Channel DOWN (Hold Mode)
- [9] : Numeric "9"
Change Step for Air band (Function Mode)
- [0] : Numeric "0"
Channel Lock Out (Function Mode)
- [.] : Decimal Key and Clear Key
- [E] : Enter
Program Mode (Function Mode)
- [HOLD] : Direct Channel Access
Close call Mode (Function Mode)
- [SCAN] : Start Scan Mode
Start Search Mode (Function Mode)
- [LIGHT] : LCD back light on/off
Key lock on/off (Function Mode)
- [FUNC] : Set Function Mode
- [PWR] : Power on/off

7. Controls/Switches : Volume Control
Squelch Control
"Reg. Alk.Battery - NI-MH Battery" Slide Switch

8. External Jacks : ANT. Jack : BNC Type
Phone Jack : 3.5 ϕ (Stereo Type)
DC Power Jack : EIAJ TYPE-II (Center Positive)

9. Internal Speaker : 8 ohm, 1.0 W Max. (32 ϕ)

10. Power Requirements : 2 x AA Size Standard Batteries 3.0V DC
2 x AA Size Ni-MH Batteries 2.4V DC
AC Adapter 6V DC 500mA Output(AC 230V 50Hz)

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11. Operating TEMP. : -20°C ~ +60°C
(-10°C ~ +50°C Close Call Operation)
12. Storage TEMP. : -30°C ~ +60°C
13. Size (mm) : 68 (W) x 31.5 (D) x 115 (H) (Without Antenna, knob, clip & other projections)
14. Weight : 165 g (without Antenna & Battery)
15. Accessories : Rubber Antenna
Belt Clip
Owner's Manual
AC Adapter
Ni-MH Battery
16. Heterodyne System
- 1st Heterodyne
- | | | |
|------------------------|---------------------------|------------------------|
| 25.0000 ~ 173.995 MHz | : Upper Heterodyne 1st IF | 380.6050-380.7000 MHz |
| 406.0000 ~ 512.000 MHz | : Upper Heterodyne 1st IF | 380.60625-380.7000 MHz |
| 806.0000 ~ 960.000 MHz | : Lower Heterodyne 1st IF | 380.7000-380.7875 MHz |
- 2nd Heterodyne
- ALL Bands : Lower Heterodyne 2nd IF 21.3000MHz
- 3rd Heterodyne
- ALL Bands : Lower Heterodyne 3rd IF 450kHz
17. Filter
- | | |
|-----------|--------------------------------------|
| 380.70MHz | : SAW Filter |
| 21.30MHz | : Monolithic Crystal Filter |
| 450kHz | : Ceramic Filter(BW±10kHz) ; FM/AM |

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MEASUREMENT CONDITIONS

1. Power Source : 3.0V DC at Battery Jack
2. Antenna Impedance : 50 ohm
3. Test Temperature : +25 $\pm$ 5°C
4. Modulation Frequency : 1kHz
5. Deviation : FM $\pm$ 3kHz Dev.
AM 60% Modulation
6. Mean Signal Input Level : 1mV
7. Audio Output Load : 8 Ω Resistive Load
8. Standard Ref. Audio Output : 50mW (0.632 Vrms)

ITEM			UNIT	NOMINAL	LIMIT
1. Sensitivity (12dB SINAD)					
VHF Low Band					
(FM)	25.005 MHz		μV	0.3	0.8 Max
(FM)	54.050 MHz		μV	0.3	0.8 Max
(FM)	86.275 MHz		μV	0.3	0.8 Max
Aircraft Band					
(AM)	118.800 MHz		μV	0.5	1.6 Max
(AM)	127.175 MHz		μV	0.5	1.6 Max
(AM)	135.500 MHz		μV	0.5	1.6 Max
VHF High Band					
(FM)	138.150 MHz		μV	0.3	1.0 Max
(FM)	162.400 MHz		μV	0.3	1.0 Max
(FM)	173.220 MHz		μV	0.3	1.0 Max
UHF Band					
(FM)	406.875 MHz		μV	0.4	1.2 Max
(FM)	453.250 MHz		μV	0.4	1.2 Max
(FM)	511.9125MHz		μV	0.4	1.2 Max
Public Service Band					
(FM)	806.000 MHz		μV	0.6	3.0 Max
(FM)	857.200 MHz		μV	0.6	3.0 Max
(FM)	954.9125MHz		μV	0.6	3.0 Max
2. Threshold Squelch (Manual)					
VHF Low Band (FM)	54.050 MHz		μV	0.3	1.3 Max
Aircraft Band (AM)	127.175 MHz		μV	0.3	3.0 Max
VHF High Band (FM)	162.400 MHz		μV	0.3	1.6 Max
UHF Band (FM)	453.250 MHz		μV	0.3	2.5 Max
Public Svc (FM)	857.200 MHz		μV	0.3	3.0 Max
3. Tight Squelch (Manual) (S+N)/N					
VHF Low Band (FM)	54.050 MHz		dB	25	15 Min
Aircraft Band (AM)	127.175 MHz		dB	16	8 Min
VHF High Band (FM)	162.400 MHz		dB	25	15 Min
UHF Band (FM)	453.250 MHz		dB	25	15 Min
Public Svc (FM)	857.200 MHz		dB	25	15 Min

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ITEM			UNIT	NOMINAL	LIMIT
4. Hum & Noise					
VHF Low Band (FM)	54.050 MHz		dB	39	30 Min
Aircraft Band (AM)	127.175 MHz		dB	50	35 Min
VHF High Band (FM)	162.400 MHz		dB	39	30 Min
UHF Band (FM)	453.250 MHz		dB	39	25 Min
Public Svc (FM)	857.200 MHz		dB	39	25 Min
5. Audio Frequency Response -6dB					
(AM)	127.175 MHz	Low	Hz	200	100~ 350
		High	Hz	1900	1300~3000
(FM)	162.400 MHz	Low	Hz	230	100~ 350
		High	Hz	1900	1300~3000
6. Audio Output Power					
(at 8Ω/Int.Speaker, (AM) 127.175 MHz)					
Max. Output Power			mW	490	200 Min
(at 8Ω/Int.Speaker, (FM) 162.400 MHz)					
Max. Output Power			mW	400	200 Min
(at 32Ω/Stereo-Headphone, (FM) 162.400MHz)					
Max. Output Power			mW	31	15~60
(at 64Ω/Earphone, (FM) 162.400 MHz)					
Max. Output Power			mW	10	3~16
7. Distortion at 50mW Output Power					
(AM) 127.175 MHz			%	0.8	10 Max
(FM) 162.400 MHz			%	1.8	8 Max
8. Power Consumption @162.400 MHz, Manual Mode					
at Squelched (Light: Off)			mA DC	110	150 Max
at full output (Light: Off)			mA DC	310	350 Max
9. Residual Noise @ Volume.:MAX SQ: Close					
(FM) 162.400 MHz			mV	0.6	2 Max
10. Scan Rate at Test Frequency			CH/Sec	40	25 Min
11. Search Rate at Test Frequency					
(28.5~29.5MHz)			STEP/Sec	140	50 Min
12. Acceptable Radio Frequency Displacement (EIA RS-204-D)					
(FM) 162.400 MHz			kHz	±6	±3 Min
13. IF Rejection					
(FM) 162.400 MHz (IF=380.700 MHz)			dB	90	50 Min

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<u>ITEM</u>	<u>UNIT</u>	<u>NOMINAL</u>	<u>LIMIT</u>
14. Close Call Sensitivity			
(FM) 54.050 MHz	dBm	-57	-30 Max
(FM) 163.400 MHz	dBm	-60	-30 Max
(FM) 511.9125MHz	dBm	-55	-30 Max
(FM) 857.200 MHz	dBm	-50	-30 Max
15. Battery Low turn on voltage	V	2.30	2.15~2.45
16. Auto power off voltage	V	2.15	2.0~2.3
17. Battery charge current	mA	150	110~190

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